

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs                    | Default Operator | Plurals | Time Stamp       |
|-------|------|--|------------------------|------------------|---------|------------------|
| L1    | 3    | ((("5399024") or ("20060171617") or ("20020047239")).PN.   | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 14:28 |
| L2    | 339  | (277/403).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 15:29 |
| L4    | 164  | (384/122,124).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 16:06 |
| L5    | 1    | ("2006/0171617").URPN.   | USPAT                  | OR               | OFF     | 2009/11/02 16:07 |
| L6    | 327  | (277/411).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 16:09 |
| L7    | 237  | (277/400).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 16:11 |
| L8    | 8    | ("6109617"   "6135458"   "6155572"   "6196790"   "6325378").PN. OR ("6494460").URPN.   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2009/11/02 16:15 |
| L9    | 28   | ("2531079"   "3486760"   "3498620"   "3526408"   "3589738"   "3804424"   "3917289"   "4196911"   "4447063"   "4523764"   "5052694"   "6059293"   "6068263"   "6068264").PN. OR ("6135458").URPN. | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2009/11/02 16:21 |
| L10   | 112  | (277/413).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 16:25 |
| L13   | 567  | (277/400,403).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 16:37 |
| L14   | 64   | 13 and valve   | US-PGPUB; USPAT        | OR               | ON      | 2009/11/02 16:38 |
| L15   | 31   | ("2089773"   "2374353"   "2509912"   "3079605"   "3480284"   "4277072"   "4471964").PN. OR ("4613141").URPN.   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2009/11/02 16:41 |
| L16   | 334  | (277/387).CCLS.  | US-PGPUB; USPAT        | OR               | OFF     | 2009/11/02 16:48 |

|     |     |   |                              |    |     |                     |
|-----|-----|---|------------------------------|----|-----|---------------------|
| L17 | 60  | 16 and valve  | US-PGPUB;<br>USPAT           | OR | ON  | 2009/11/02<br>16:50 |
| S1  | 17  | ("3813086"   "3869963"  <br>"3871099"   "3945777"  <br>"4007974"   "4331337"  <br>"4373535"   "4375891"  <br>"4426087"   "4426161"  <br>"4461612"   "4747752"  <br>"4884945"   "5222742"  <br>"5531457"   "5558341"  <br>"5975537").PN. | USPAT                        | OR | OFF | 2007/10/10<br>15:19 |
| S2  | 3   | ((("5399024") or<br>("2137487") or<br>("6435822"))).PN.   | USPAT                        | OR | OFF | 2007/10/10<br>15:19 |
| S3  | 19  | ("2137487"   "3930691"  <br>"4362304"   "4403873"  <br>"4496251"   "4515486"  <br>"4544285"   "4639146"  <br>"4738453"   "4738550"  <br>"4919549"   "4927275"  <br>"5246295").PN. OR<br>("5399024").URPN.                               | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2007/10/10<br>15:49 |
| S4  | 43  | ("1940779"   "2586739"  <br>"2888281"   "3169024"  <br>"3559725").PN. OR<br>("4738453").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2007/10/10<br>15:51 |
| S5  | 17  | ("2881014"   "3751045"  <br>"4114900"   "4252385"  <br>"4260166"   "4277111"  <br>"4632404"   "4643437"  <br>"4659092"   "4676668"  <br>"4738453"   "4792146").<br>PN. OR ("5246295").<br>URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2007/10/10<br>15:56 |
| S6  | 335 | (277/403).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2007/10/10<br>16:32 |
| S7  | 223 | (277/400).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2007/10/10<br>16:32 |
| S8  | 59  | ("3499653").URPN.   | USPAT                        | OR | OFF | 2007/10/10<br>17:05 |
| S9  | 301 | (277/411).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2007/10/10<br>17:06 |
| S10 | 13  | S9 and pad  | US-PGPUB;<br>USPAT           | OR | ON  | 2007/10/10<br>17:06 |
| S11 | 0   | (277/122,124).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2007/10/10<br>17:08 |
| S12 | 159 | (384/122,124).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2007/10/10<br>17:09 |

|     |     |   |                              |    |     |                     |
|-----|-----|---|------------------------------|----|-----|---------------------|
| S13 | 1   | ("2006/0171617").URPN.  | USPAT                        | OR | OFF | 2007/10/10<br>17:09 |
| S14 | 43  | ("1940779"   "2586739"  <br>"2888281"   "3169024"  <br>"3559725").PN. OR<br>("4738453").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2007/10/10<br>17:56 |
| S15 | 19  | ("2137487"   "3930691"  <br>"4362304"   "4403873"  <br>"4496251"   "4515486"  <br>"4544285"   "4639146"  <br>"4738453"   "4738550"  <br>"4919549"   "4927275"  <br>"5246295").PN. OR<br>("5399024").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2009/04/17<br>16:39 |
| S16 | 44  | ("1940779"   "2586739"  <br>"2888281"   "3169024"  <br>"3559725").PN. OR<br>("4738453").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2009/04/17<br>16:40 |
| S17 | 60  | ("3499653").URPN.   | USPAT                        | OR | OFF | 2009/04/17<br>16:43 |
| S18 | 10  | ("2814512"   "3447809"  <br>"3499653"   "3529838").<br>PN. OR ("3905606").<br>URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2009/04/17<br>16:46 |
| S19 | 9   | ("3529838").URPN.   | USPAT                        | OR | OFF | 2009/04/17<br>16:48 |
| S20 | 4   | hydrodynamic same seal<br>\$3 same pad same conical   | US-PGPUB;<br>USPAT           | OR | ON  | 2009/04/17<br>16:56 |
| S21 | 304 | seal\$3 same pad same<br>conical  | US-PGPUB;<br>USPAT           | OR | ON  | 2009/04/17<br>16:57 |
| S22 | 11  | seal\$3 same pad same<br>conical same thrust  | US-PGPUB;<br>USPAT           | OR | ON  | 2009/04/17<br>16:57 |
| S23 | 339 | (277/403).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2009/04/17<br>17:02 |
| S24 | 236 | (277/400).CCLS.   | US-PGPUB;<br>USPAT           | OR | OFF | 2009/04/17<br>17:03 |

### EAST Search History (Interference)

| Ref # | Hits | Search Query        | DBs  | Default Operator | Plurals | Time Stamp          |
|-------|------|---------------------|------|------------------|---------|---------------------|
| L3    | 0    | (384/122,124).CCLS. | UPAD | OR               | OFF     | 2009/11/02<br>16:05 |

|     |     |  |                |    |    |                     |
|-----|-----|--|----------------|----|----|---------------------|
| L11 | 124 | (gas and seal\$3 and gap and (bias\$3 or spring) and chamber and valve).clm. | USPAT;<br>UPAD | OR | ON | 2009/11/02<br>16:33 |
| L12 | 57  | (gas and seal\$3 and gap and (bias\$3 or spring) and chamber and valve).clm. | US-PGPUB       | OR | ON | 2009/11/02<br>16:34 |

11/ 2/ 09 5:04:48 PM

C:\ Documents and Settings\ APickard\ My Documents\ EAST\ workspaces\ 10565172.wsp